

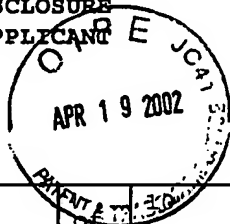
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Substitute for Form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/054,300
		Filing Date	January 22, 2002
		First Named Inventor	Takeshi IMANISHI
		Group Art Unit	1646
		Examiner Name	
Sheet	1	Attorney Docket Number	01834CIP/HG



U.S. PATENT DOCUMENTS

Exam. Inits*	Cite No ¹	Document Number	Kind Code ²	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion
⑫ 						

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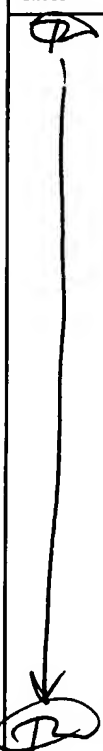
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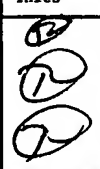
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U.S. PATENT DOCUMENTS

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		5,591,623		BENNETT et al.	01-07-1997	
		5,591,720		ANDERSON et al.	01-07-1997	
		5,607,923		COOK et al.	03-04-1997	
		5,620,963		COOK et al.	04-15-1997	
		5,658,891		DRAPER et al.	08-19-1997	
		5,661,134		COOK et al.	08-26-1997	
		5,681,747		BOGGS et al.	10-28-1997	
		5,681,944		CROOKE et al.	10-28-1997	
		5,691,461		ECKER et al.	11-25-1997	
		5,877,309		McKAY et al.	03-02-1999	
		5,955,443		BENNETT et al.	09-21-1999	
		5,985,558		DEAN et al.	11-16-1999	
		6,111,094		BENNETT et al.	08-29-2000	
		6,127,533		COOK et al.	10-03-2000	

FOREIGN PATENT DOCUMENTS

Exam Inits ¹	Cite No ²	offc ¹	Document Number ⁴	Kind Code ⁵	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion	T ⁶
		WIPO	WO 94/08003		MONIA et al.	04-14-1994		
		WIPO	WO 96/31557		JACOBSEN	10-10-1996		
		WIPO	WO 98/39352		IMANISHI	09-11-1998		

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(D)		GRIFFITHS and NICKOLOFF, "Keratinocyte Intercellular Adhesion Molecule-1 (ICAM-1) Expression Precedes Dermal T Lymphocytic Infiltration in Allergic Contact Dermatitis (<i>Rhus dermatitis</i>)", <u>Am. J. Pathology</u> , 1989, 135, 1045-1053.	
(D)		THUONG and HELENE, "Sequence-Specific Recognition and Modification of Double-Helical DNA by Oligonucleotides", <u>Angew. Chem. Int. Ed. Engl.</u> , 1993, 32, 666-690.	
(D)		ENGLISH and GAUSS, "Chemically Modified Oligonucleotides as Probes and Inhibitors", <u>Angewandte Chemie</u> , International Edition, 1991, 30, 613-722.	
(D)		MANOHARAN et al., "Chemical Modifications to Improve Uptake and Bioavailability of Antisense Oligonucleotides", <u>Ann. N.Y. Acad. Sci.</u> , 1992, 660, 306-309.	
(D)		STETLER-STEVENSON et al., "Tumor Cell Interactions with the Extracellular Matrix During Invasion and Metastasis", <u>Annu. Rev. Cell Biol.</u> , 1993, 9, 541-573.	
(D)		COOK, "Medicinal chemistry of antisense oligonucleotides- future opportunities", <u>Anti-Cancer Drug Design</u> , 1991, 6, 585-607.	
(D)		MORASSUTTI et al., "Reduction of <i>mdr1</i> Gene Amplification in Human Multidrug-Resistant LoVo DX Cell Line Is Promoted by Triple Helix-Forming Oligonucleotides", <u>Antisense & Nucleic Acid Drug Development</u> , 1999, 9, 261-270.	
(D)		SANGHVI, "Heterocyclic Base Modifications in Nucleic Acids and their Applications in Antisense Oligonucleotides", <u>Antisense Research and Applications</u> , Ed. S.T. Crooke and B. Lebleu, CRC Press, 1993, 273-288 (Chapter 15).	
(D)		SHIOHARA et al., "Fixed Drug Eruption", <u>Arch. Dermatol.</u> , 1989, 125, 1371-1412.	
Examiner Signature			Date Considered 6/22/06

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(B)		EBBINGHAUS et al., "Inhibition of Transcription Elongation in the HER-2/neu Coding Sequence by Triplex-Directed Covalent Modification of the Template Strand", <u>Biochemistry</u> , 1999, 38, 619-628.	
(P)		CATAPANO et al., "Inhibition of Gene Expression and Cell Proliferation by Triple Helix-Forming Oligonucleotides Directed to the c-myc Gene", <u>Biochemistry</u> , 2000, 39, 5126-5138.	
(D)		MISHRA et al., "Improved leishmanicidal effect of phosphorotioate antisense oligonucleotides by LDL-mediated delivery", <u>Biochimica et Biophysica Acta</u> , 1995, 1264, 229-237.	
(B)		SVINARCHUK et al., "Inhibition of HIV proliferation in MT-4 cells by antisense oligonucleotide conjugated to lipophilic groups", <u>Biochimie</u> , 1993, 75, 49-54.	
(B)		MANOHARAN et al., "Introduction of a lipophilic thioether tether in the minor groove of nucleic acids for antisense applications", <u>Bioorganic & Medicinal Chemistry Letters</u> , 1993, 3, 2765-2770.	
(B)		MANOHARAN et al., "Cholic Acid-Oligonucleotide Conjugates for Antisense Applications", <u>Bioorganic & Medicinal Chemistry Letters</u> , 1994, 4, 1053-1060.	
(B)		YU et al., "Specific Inhibition of PCR by Non-Extendable Oligonucleotides Using a 5' to 3' Exonuclease-Deficient DNA Polymerase", <u>Biotechniques</u> , 1997, 23, 714-720.	
(B)		LISBY et al., "Intercellular adhesion molecule-1 (ICAM-1) expression correlated to inflammation", <u>Brit. J. Dermatol.</u> , 1989, 120, 479-484.	
(B)		TAM and FRASER-REID, "A synthetic route to 4-C-methyl-xylo-furanose", <u>Can. J. Chem.</u> , 1979, 57, 2818-2822.	
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Not Received (12) (12) (12) (12) (12) (12) (12)		RESNICOFF et al., "Inhibition of rat C6 glioblastoma tumor growth by expression of insulin-like growth factor I receptor antisense mRNA", <u>Cancer Immunol. Immunother.</u> , 1996, 42, 64-68. MAHER III, "Prospects for the Therapeutic Use of Antigen Oligonucleotides", <u>Cancer Investigation</u>, 1996, 14(1), 66-82.	
		RESNICOFF et al., "Rat Glioblastoma Cells Expressing an Antisense RNA to the Insulin-like Growth Factor-1 (IGF-1) Receptor are Nontumorigenic and Induce Regression of Wild-Type Tumors", <u>Cancer Research</u> , 1994, 54, 2218-2222.	
		PASS et al., "Inhibition of Hamster Mesothelioma Tumorigenesis by an Antisense Expression Plasmid to the Insulin-like Growth Factor-1 Receptor", <u>Cancer Research</u> , 1996, 56, 4044-4048.	
		Hua and MUSCHEL, "Inhibition of Matrix Metalloproteinase 9 Expression by a Ribozyme Blocks Metastasis in a Rat Sarcoma Model System", <u>Cancer Research</u> , 1996, 56, 5279-5284.	
		BRIMACOMBE and CHING, "Nucleophilic Displacement Reactions in Carbohydrates", <u>Carbohydrate Research</u> , 1968, 8, 82-88.	
		BOGEMEYER et al., "Borrelia Burgdorferi Upregulates the Adhesion Molecules E-selectin, P-selectin, ICAM-1 and VCAM-1 on Mouse Endothelioma Cells in vitro", <u>Cell Adhesion and Communication</u> , 1994, 2, 145-157.	
		KERR et al., "TGF-β1 Inhibition of Transin/Stromelysin Gene Expression is Mediated through a Fos Binding Sequence", <u>Cell</u> , 1990, 61, 267-278.	
		SINGH et al., "LNA (locked nucleic acids): synthesis and high-affinity nucleic acid recognition", <u>Chem. Commun.</u> , 1998, 4, 455-456.	
Examiner Signature			Date Considered 6/22/06

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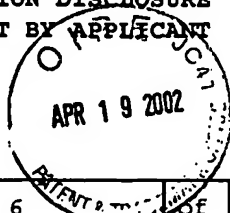
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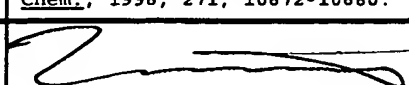


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OTHER PRIOR ART - NON-PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of author (in CAPITAL LETTERS), title of article, title of item, date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		BIRKENDAL-HANSEN, "Proteolytic remodeling of extracellular matrix", <u>Current Opinion in Cell Biology</u> , 1995, 7, 728-735.	
		LEROITH et al., "Molecular and Cellular Aspects of the Insulin-Like Growth Factor I Receptor", <u>Endocrine Reviews</u> , 1995, 16, 143-163.	
		KABANOV et al., "A new class of antivirals: antisense oligonucleotides combined with a hydrophobic substituent effectively inhibit influenza virus reproduction and synthesis of virus-specific proteins in MDCK cells", <u>FEBS Lett.</u> , 1990, 259, 327-330.	
		PIERRE MARTIN, "Ein Zugang zu 2'-O-Alkylribonucleosiden und Eigenschaften deren Oligonucleotide", <u>Helv. Chim. Acta</u> , 1995, 78, 486-504.	
		DELISSER et al., "Molecular and functional aspects of PECAM-1/CD31", <u>Immunology Today</u> , 1994, 15, 490-495.	
		HURTENBACH et al., "Prednisolone Reduces Experimental Arthritis, and Inflammatory Tissue Destruction in Scid Mice Infected with <i>Borrelia burgdorferi</i> ", <u>Int. J. Immunopharmac.</u> , 1996, 18, 281-288.	
		HIMELSTEIN et al., "Metalloproteinases in Tumor Progression: The Contribution of MMP-9", <u>Invasion Metastasis</u> , 1994, 14, 246-258.	
		HO et al., "Treatment of severe lichen planus with cyclosporine", <u>J. Am. Acad. Dermatol.</u> , 1990, 22, 64-68.	
		GUM et al., "Stimulation of 92-kDa Gelatinase B Promoter Activity by ras Is Mitogen-activated Protein Kinase Kinase 1-independent and Requires Multiple Transcription Factor Binding Sites Including Closely Spaced PEA3/ets and AP-1 Sequences", <u>J. Biol. Chem.</u> , 1996, 271, 10672-10680.	
Examiner Signature			Date Considered
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Ⓟ		LITWIN et al., "Novel Cytokine-independent Induction of Endothelial Adhesion Molecules Regulated by Platelet/Endothelial Cell Adhesion Molecule (CD31)", <u>J. Cell Biol.</u> , 1997, 139, 219-228.		
Ⓡ		NEWMAN, "The Biology of PECAM-1", <u>J. Clin. Invest.</u> , 1997, 99, 3-8.		
Ⓟ		HAKUGAWA et al., "The Inhibitory Effect of Anti-Adhesion Molecule Antibodies on Eosinophil Infiltration in Cutaneous Late Phase Response in Balb/c Mice Sensitized with Ovalbumin (OVA)", <u>J. Dermatol.</u> , 1997, 24, 73-79.		
Ⓟ		OUWERKERK-MAHADEVAN et al., "Isoenzyme-Selective Inhibition of Glutathione Conjugation in Vivo: Selective Inhibition of the Conjugation of S-2-Bromoisovalerylurea in the Rat", <u>J. Pharmacol. Exp. Therapeut.</u> , 1996, 276, 923-928.		
Ⓟ		WAHLESTEDT et al., "Antisense oligodeoxynucleotides to NMDA-R1 receptor channel protect cortical neurons from excitotoxicity and reduce focalischaemic infarctions", <u>Nature</u> , 1993, 363, 260-263.		
Ⓟ		DEMERS et al., "Enhanced PCR amplification of VNTR locus D1S80 using peptide nucleic acid (PNA)", <u>Nucleic Acids Research</u> , 1995, 23, 3050-3055.		
Ⓟ		CHEN et al., "Synthesis of oligodeoxyribonucleotide N3'-P5' phosphoramidates", <u>Nucleic Acids Research</u> , 1995, 23, 2661-2668.		
Ⓟ		SHEA et al., "Synthesis, hybridization properties and antiviral activity of lipid-oligodeoxynucleotide conjugates", <u>Nucleic Acids Research</u> , 1990, 18, 3777-3783.		
Ⓡ		OBERHAUSER and WAGNER, "Effective incorporation of 2'-O-methyl-oligoribonucleotides into liposomes and enhanced cell association through modification with thiocholesterol", <u>Nucleic Acids Research</u> , 1992, 20, 533-538.		
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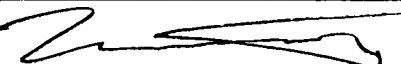


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Not complete (D) (D) (D) (D) (B) (D) (D) (D)		SURZHYKOV and KRAVEVSKIY, "Novel 4'-Branched Nucleosides", <u>Nucleosides & Nucleotides</u>, 1994, 13, 2283-2305.		
		MANOHARAN et al., "Oligonucleotide conjugates: alteration of the pharmacokinetic properties of antisense agents", <u>Nucleosides & Nucleotides</u> , 1995, 14, 969-973.		
		REGEZI et al., "Vascular adhesion molecules in oral lichen planus", <u>Oral Surg. Oral Med. Oral Pathol.</u> , 1996, 81, 682-690.		
		HEGEMANN and MAHRLE, "Biochemical Pharmacology of Protein Kinase C and its Relevance for Dermatology", <i>Pharmacology of the Skin</i> , Ed. H. Mukhtar, CRC Press, Boca Raton, FL., 1992, 357-368.		
		BERNHARD et al., "Direct evidence linking expression of matrix metalloproteinase 9 (92-kDa gelatinase/collagenase) to the metastatic phenotype in transformed rat embryo cells", <u>Proc. Natl. Acad. Sci.</u> , 1994, 91, 4293-4297.		
		PORRECA et al., "A comparison of the potential role of the tetrodotoxin-insensitive sodium channels, PN3/SNS and NaN/SNS2, in rat models of chronic pain", <u>Proc. Natl. Acad. Sci.</u> , 1999, 96, 7640-7644.		
		DEAN and MCKAY, "Inhibition of protein kinase C- α expression in mice after systemic administration of phosphorothioate antisense oligodeoxynucleotides", <u>Proc. Natl. Acad. Sci.</u> , 1994, 91, 11762-11766.		
	RININSLAND et al., "Suppression of insulin-like growth factor type I receptor by a triple-helix strategy inhibits IGF-I transcription and tumorigenic potential of rat C6 glioblastoma cells", <u>Proc. Natl. Acad. Sci.</u> , 1997, 94, 5854-5859.			
	LETSINGER et al., "Cholesterol-conjugated oligonucleotides: Synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture", <u>Proc. Natl. Acad. Sci.</u> , 1989, 86, 6553-6556.			
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		GIOVANNANGELI et al., "Triple-helix formation by oligonucleotides containing the three bases thymine, cytosine, and guanine", <u>Proc. Natl. Acad. Sci.</u> , 1992, 89, 8631-8635.	
		RUBIN and BASERGA, "Biology of Disease: Insulin-Like Growth Factor-I Receptor", <u>Laboratory Investigation</u> , 1995, 73, 311-331.	
		MILNER, "Charles Darwin and Associates, Ghostbusters", <u>Scientific American</u> , 1996, 275, 72-77.	
		BYNE, "The Biological Evidence Challenged", <u>Scientific American</u> , May 1994, 50-55.	
		WAHLESTEDT et al., "Modulation of Anxiety and Neuropeptide Y-Y1 Receptors by Antisense Oligodeoxynucleotides", <u>Science</u> , 1993, 259, 528-531.	
		KOSHKIN et al., "LNA (Locked Nucleic Acids): Synthesis of the Adenine, Cytosine, Guanine, 5-Methylcytosine, Thymine and Uracil Bicyclonucleoside Monomers, Oligomerisation, and Unprecedented Nucleic Acid Recognition", <u>Tetrahedron</u> , 1998, 54, 3607-3630.	
		IYER et al., "A Novel Nucleoside Phosphoramidite Synthon Derived from 1R,2S-Ephedrine", <u>Tetrahedron Asymmetry</u> , 1995, 6, 1051-1054.	
		MANOHARAN et al., "Lipidic Nucleic Acids", <u>Tetrahedron Letters</u> , 1995, 36, 3651-3654.	
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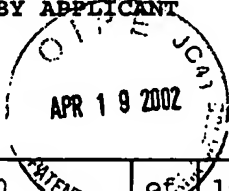
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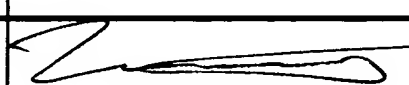


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Substitute for Form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT 		Application Number	10/054,300	
		Filing Date	January 22, 2002	
		First Named Inventor	Takeshi IMANISHI	
		Group Art Unit	1646	
		Examiner Name		
Sheet	10	10	Attorney Docket Number	01834CIP/HG

OTHER PRIOR ART - NON-PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of author (in CAPITAL LETTERS), title of article, title of item, date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
(T)		OBIKA et al., "Stability and structural features of the duplexes containing nucleoside analogues with a fixed N-type conformation, 2'-O,4'-C-methylenionucleosides", <u>Tetrahedron Letters</u> , 1998, 39, 5401-5404.	
(P)		OBIKA et al., "Synthesis of a conformationally locked AZT analogue, 3'-azido-3'-deoxy-2'-O,4'-C-methylene-5-methyluridine", <u>Tetrahedron Letters</u> , 1999, 40, 6465-6468.	
(B)		BERKOW et al., eds, <i>The Merck Manual of Diagnosis and Therapy</i> , 15th Ed., Rahway, NJ, 1987, 2263-2277.	
(D)		BERKOW et al., eds, <i>The Merck Manual of Diagnosis and Therapy</i> , 15th Ed., Rahway, NJ, 1987, 2283-2285.	
(P)		BERKOW et al., eds, <i>The Merck Manual of Diagnosis and Therapy</i> , 15th Ed., Rahway, NJ, 1987, 2286-2292.	
Not Received		BERKOW et al., eds, <i>The Merck Manual of Diagnosis and Therapy</i>, 15th Ed., Rahway, NJ, 1987, 2301-2310.	
		ALBERT and MORRIS, "Antisense knockouts: molecular scalpels for the dissection of signal transduction", <u>Trends in Pharmacological Sciences</u> , 1994, 15, 250-254.	
Examiner Signature			Date Considered
			6/22/06

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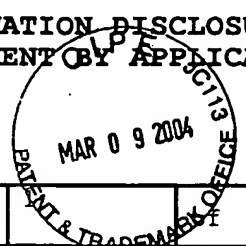
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			Filing Date	January 22, 2002
			First Named Inventor	Takeshi IMANISHI et al
			Group Art Unit	1646
			Examiner Name	
Sheet	1	Attorney Docket Number	01834CIP/HG	

U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

Exam Inits ¹	Cite No ¹	offc ³	Document Number ⁴	Kind Code ⁵	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion	T ⁶
		WO	99/14226		WENGEL et al	03-25-1999		

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	Filed		January 22, 2002		
	First Named Inventor		Takeshi IMANISHI		
	Group Art Unit		1646		
	Examiner Name				
1	of	1	Attorney Docket Number		01834CIP/HG



U.S. PATENT DOCUMENTS

Exam. Inits ¹	Cite No ¹	Document Number	Kind Code ²	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion
(73)		2002/0147332	A1	KANEKO et al.	10-10-2002	
(72)		2003/0207841	A1	KANEKO et al.	11-06-2003	

FOREIGN PATENT DOCUMENTS

Exam Inits ¹	Cite No ¹	offc ¹	Document Number ⁴	Kind Code ³	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion	T ⁶

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